G. HOGG & A. E. HATHAWAY.

SPRING MATTRESS.

APPLICATION FILED AUG. 31, 1912.

1,067,339. Patented July 15, 1913.

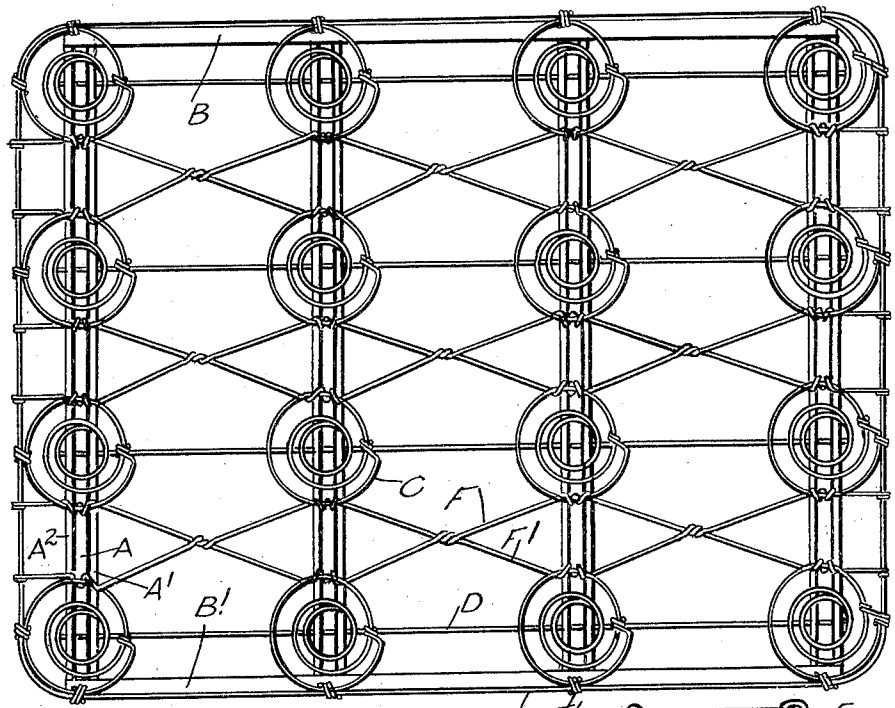


FIG. 1.

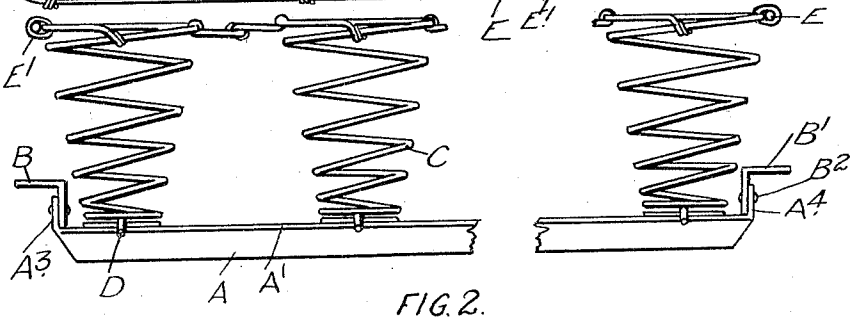


FIG. 2.

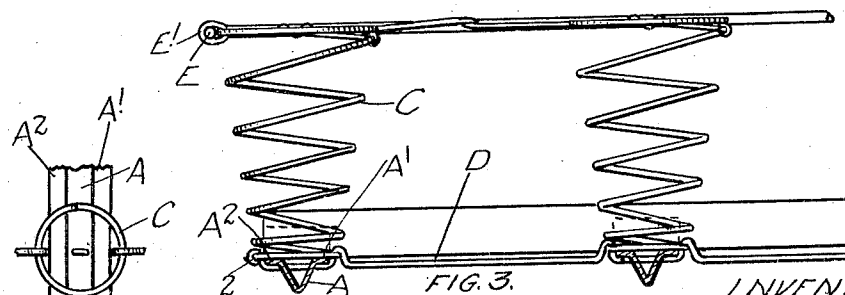


FIG. 3.

FIG. 4.

WITNESSES.

INVENTORS.
A. E. HATHAWAY
GEORGE HOGG

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE HOGG AND ALBERT ERNEST HATHAWAY, OF TORONTO, ONTARIO, CANADA.

SPRING-MATTRESS.

1,067,339. Specification of Letters Patent. Patented July 15, 1913.

Application filed August 31, 1912. Serial No. 718,032.

To all whom it may concern:

Be it known that we, GEORGE HOGG and ALBERT ERNEST HATHAWAY, both of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Spring-Mattresses, of which the following is the specification.

Our invention relates to improvements in spring mattresses and the object of the invention is to devise a light mattress in which an equal resiliency over its entire upper surface is retained, which will be so constructed as to prevent the formation of inequalities in such surface by continued use and it consists essentially of a series of cross bars V-shaped in cross section, longitudinal connecting bars connecting the ends of the cross bars together, spiral springs arranged in cross and longitudinal rows on the cross bars, means for connecting the spiral springs to the cross bars, a bounding wire extending around the mattress to which the top of each outer spiral spring is connected and means extending from the bounding wire for connecting all the spiral springs together as hereinafter more particularly explained by the following specification.

Figure 1, is a plan view of our mattress. Fig. 2 is an enlarged elevation part being broken away. Fig. 3, is a longitudinal section through a portion of the mattress. Fig. 4, is a plan detail showing the means for connecting the spiral springs to the cross bars.

In the drawings like letters of reference indicate corresponding parts in each figure.

A are a series of cross bars substantially V-shape in cross section and provided with lateral flanges A′ and A^2 and end flanges A^3 and A^4.

B and B′ are longitudinal angle bars extending along each side of the mattress and connecting the cross bars A together by means of the rivets B^2 extending through the flanges A^3 and A^4 and the bars B and B′.

The springs C are arranged in longitudinal and cross rows upon the cross bars A.

D are longitudinal wires which extend through the cross bars A immediately below the flanges A′ and A^2. The wires D after passing through each cross bar A extend over the lowermost coil of each spring C. By this means the springs C are connected to the cross bars A, the end of the wire D being at its termination wrapped around the lowermost coil of the end spring of each longitudinal row of springs at the point 2.

E is a bounding wire which extends around the whole mattress being connected to each spiral spring at the outside of each top coil by a suitable wrapping wire E′.

F and F′ are a pair of longitudinal wires connected at their ends to the bounding wire E and wrapped around the top coil of each longitudinal row of springs. The wires F and F′ are wound around each other at a point between each cross row of springs. By this construction it will be seen that all the springs C are firmly connected and bound together, so that any pressure exerted on the top surface of the mattress is distributed over the whole surface and therefore prevents any inequalities being formed arising from unequal strain on the surface of the mattress and by this means render the mattress more serviceable and lasting. It will also be understood that by the employment of the V-shaped bars such as described we produce a much lighter mattress and yet at the same time a mattress of greater strength.

What we claim as our invention is—

A spring mattress comprising a series of cross bars V-shaped in cross section and having lateral flanges, and longitudinal bars connecting the cross bars together, a series of horizontal and cross rows of spiral springs supported by the cross bars, longitudinal wires extending through the cross bars directly below the lateral flanges and extending over the lowermost coil of each spring at points diametrically opposite, and means for connecting the upper end of the spiral springs together so as to form a homogeneous resilient surface, as and for the purpose specified.

GEORGE HOGG.
ALBERT ERNEST HATHAWAY.

Witnesses:
B. BOYD,
S. HALLATT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."